C l a i m s

1. System for health monitoring of aquatic species in aquacultures comprising a plurality of containments for aquatic species, wherein a sample of used water from at least one containment is supplied from at least one sample point to at least one sentinel containment housing sentinel aquatic species as bio-indicators for the detection of infectious particles and/or chemical factors and/or physical factors in said supplied water sample.

2. System according to claim 1,
c h a r a c t e r i z e d by
at least one quality monitoring device for an additionally examination of the used water supplied from the at least one sample point.

3. System according to claim 1 or 2, wherein said containments are aquaria, tanks, basins, pools, partitions of creeks, rivers or lakes and such like.

4. System according to at least one of the preceding claims, wherein the system is a re-circulating system.

5. System according to at least one of the preceding claims,
c h a r a c t e r i z e d by
at least one fresh water reservoir for supplying fresh water via water supply pipes to said containments.

6. System according to at least one of the preceding claims, c h a r a c t e r i z e d by water pumps providing a constant pressure in the system and water renewal in said containments.

7. System according to at least one of the claim 4 to 6, c h a r a c t e r i z e d by a filtration system.

8. System according to claim 7, wherein said filtration system comprises at least a large pore-filter unit, a particulate-filter unit, a fine-filter unit, a bio-filter unit, an activated carbon-filter unit and/or an UV-sterilization unit.

9. System according to at least one the claims 4 to 8, c h a r a c t e r i z e d by collecting pipes for collecting and supplying the used water to said particulate-filter unit, said bio-filter unit and said activated carbon-filter unit, being placed behind each other in downstream direction.

10. System according to at least one of the claims 4 to 9, c h a r a c t e r i z e d by a pump reservoir to which the used water is supplied via said particulate-filter unit, said bio-filter unit and said activated carbon-filter unit and to which tap water is supplied via a reverse osmosis unit.

11. System according to at least one of the claims 4 to 10, wherein said UV-sterilization unit is placed between said pump reservoir and said fresh water reservoir.

12. System according to at least one of the claims 4 to 11, wherein said fine filter unit is placed between said UV-sterilization unit and said fresh water reservoir.

13. System according to at least one of the claims 4 to 12, wherein sample points are placed for fresh water sampling, water reservoir sampling, sentinel containment sampling, exit water sampling, pipe sampling, filter sampling, fresh tap water sampling, reverse osmosis unit sampling, pump reservoir sampling, pump sampling, UV-sterilization unit sampling and / or fine filter unit sampling.

14. System according to at least one of the preceding claims, wherein the aquatic species are fish and wherein the sentinel aquatic species are fish, which are highly susceptible for fish pathogens.

15. Method for health monitoring of aquatic species in aquacultures of a system comprising a plurality of containments for aquatic species, wherein a sample of used water from at least one containment is supplied from at least one sample point to at least one sentinel containment housing sentinel aquatic species as bio-indicators for the detection of infectious particles in said supplied water sample.